





LEO MW PRODUCT RANGE

 $640 \times 512 - 15 \mu m - MCT$

LEO MW is a compact detector specially designed for SWaP (optimised size, weight and power) MWIR applications.

In function of your application and your main requirements, the LEO MW product range is available in version up to 110 K.

Thanks to its digital output, this product simplifies your interfaces and speeds up the development of your systems.

THE BEST PERFORMANCE IN A COMPACT VGA PRODUCT

- OPTIMIZED FORM FACTOR
- INTEGRATION FRIENDLINESS
- RELIABILITY

DEFENSE

SURVEILLANCE







•• THE BEST PERFORMANCE IN A COMPACT

VGA PRODUCT **

ARRAY FEATURES					
Detector spectral response	■ 3.7 µm - 4.8 µm				
FPA Operating temperature	■ 90K to 100 K				
ROIC (READ-OUT INTEGRATED CIRCUIT)					
Selection	Serial electrical interface (driven by the proxy board)				
ROIC architecture	■ Snapshot operation, direct injection input circuit, selectable read mode (IWR or ITR)				
	■ Programmable integration time				
ROIC functionalities	■ Anti-blooming				
	■ Image invert/revert/inverse				
Windowing modes	■ 640 x 512 / 640 x 480 / 512 x 512 or programmable				
Charge handling capacity	■ 6.5 10° e- (ITR mode) or 5 10° e- (IWR mode)				
Signal outputs	■ Digital, 14 bits, CAMERALINK®				
Pixel output rate	■ Up to 10 MHz per output				
Frame rate	■ Up to 60 Hz full frame rate				
INPUT / OUTPUT					
Board power supply	■ 5V				
TYPICAL(*) PERFORMANCES					
NETD	■ 20 mK (293 K, f/5.5, 50 % well fill, 60 Hz)				
Array operability	99.8%				
Non uniformity (DC level and responsivity)	■ 2.5% RMS (σ/mean, 293 K uncorrected performance)				
	RM2 (***)	K563(***)			
FOV	f/4; f/5.5	f/4; f/5.5			
Regulated input power (**)	5.3 WDC	5.3 WDC			
Cooldown input power (**)	12.4 WDC	11.8 WDC			
Power supply	12 V	12 V			
Cooldown time	4 min 10 s	4 min 10 s			
Cooler dimensions (mm)	Ø 30.85 x L 82	Ø 37.8 x L 59			
IDCA height (optical axis, mm)	119.2				
Weight	< 0.355 kg 0.38 kg				
Operating temperature	[- 40° C; 65° C]	[- 40° C; 65° C]			
MTTF	30000h	8025h			

(*) Optional extended waveband : 40% @ 0.5 µm, 75% @ 0.8 µm, >80% from 0.9 µm to 1.6 µm (**) WDC = at cooler C&CE DC input

(***) Performances related to the 80K LEO MW

OPTIONS

Technical training and support

Demokit for easy image processing in lab

Recognition distances for human measuring 1.80 m x 0.50 m $\,$

25 mm lens (28.2°x 16.2°)			264m	>	0.50m
100 mm lens	<u>;</u>	527m			80m
(7.3°x 4.1°)	1054m	İ	İ		
100 mm lens	1054111	1	1		

 $Range\ for\ \textit{Johnson's criteria},\ target\ \textit{deltaT} = 2\textit{K},\ perfect\ atmospheric\ and\ optics\ transmissions},\ theoretical\ square\ pixel.$









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COMPACT

SWAP

DIGITAL CONVERSION

RELIABILITY

LEO MW

